

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 19755-19755A
Winston C vault Bonus

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by 84 Components - #2383.

Pages or sheets covered by this seal: I35916678 thru I35916689

My license renewal date for the state of North Carolina is December 31, 2019.

North Carolina COA: C-0844



January 23, 2019

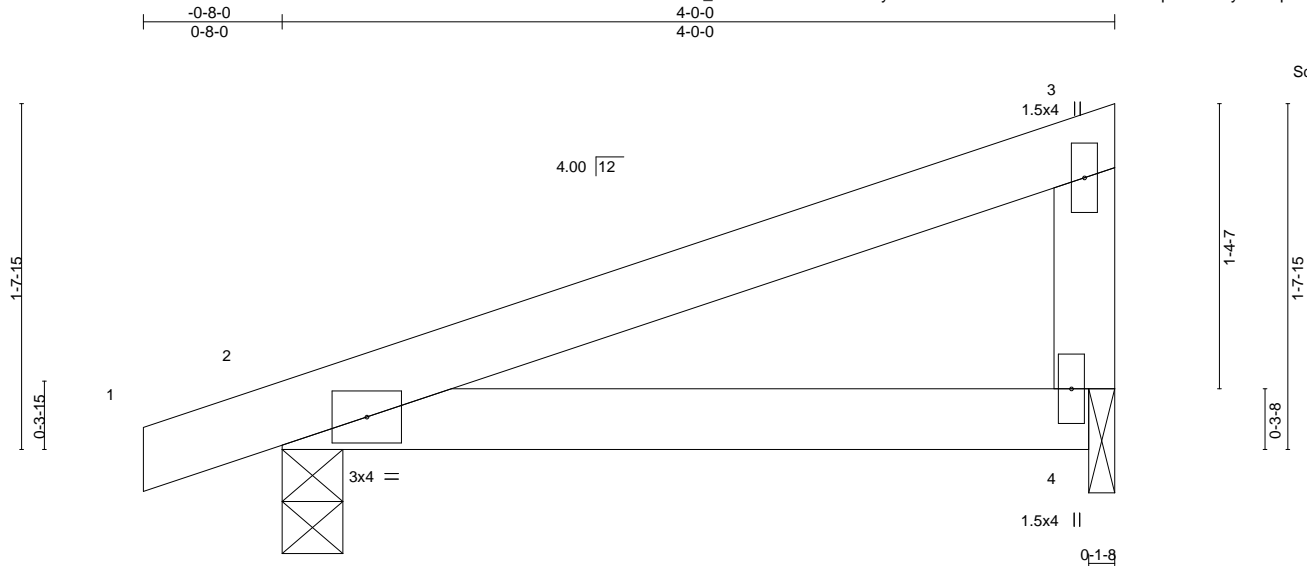
Johnson, Andrew

IMPORTANT NOTE: Truss Engineer's responsibility is solely for design of individual trusses based upon design parameters shown on referenced truss drawings. Parameters have not been verified as appropriate for any use. Any location identification specified is for file reference only and has not been used in preparing design. Suitability of truss designs for any particular building is the responsibility of the building designer, not the Truss Engineer, per ANSI/TPI-1, Chapter 2.

Job 19755-19755A	Truss JK1	Truss Type MONO TRUSS	Qty 10	Ply 1	Winston C vault Bonus Job Reference (optional)	135916678
---------------------	--------------	--------------------------	-----------	----------	---	-----------

84 Components, Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Jan 22 14:10:51 2019 Page 1
ID:i9Dc?_awT2z9D9R4O4HXSfytZQA-RoNTr2JtOJfH79K0?c4WZWIq4QW?a7y?PdKp4czsnGo



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.19	Vert(LL)	0.02	4-7	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.17	Vert(CT)	-0.02	4-7	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP							
									Weight: 15 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3

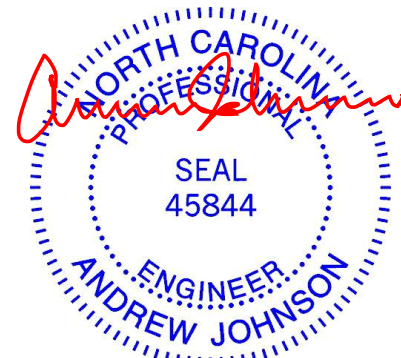
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=198/0-3-8, 4=151/0-1-8
 Max Horz 2=43(LC 11)
 Max Uplift 2=-62(LC 12), 4=-42(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



January 23, 2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

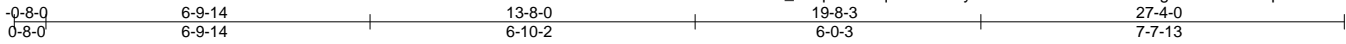


818 Soundside Road
 Edenton, NC 27932

Job 19755-19755A	Truss T1AV	Truss Type SPECIAL	Qty 4	Ply 1	Winston C vault Bonus Job Reference (optional)	135916680
---------------------	---------------	-----------------------	----------	----------	---	-----------

84 Components, Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Jan 22 14:10:54 2019 Page 1
ID: B86d_O3qmX394qlcAhGzWryKJF9-sN3bT3LhE1r?c3bgleDA8NETdMpnIzS5bYtgxznGl



Scale = 1:48.5

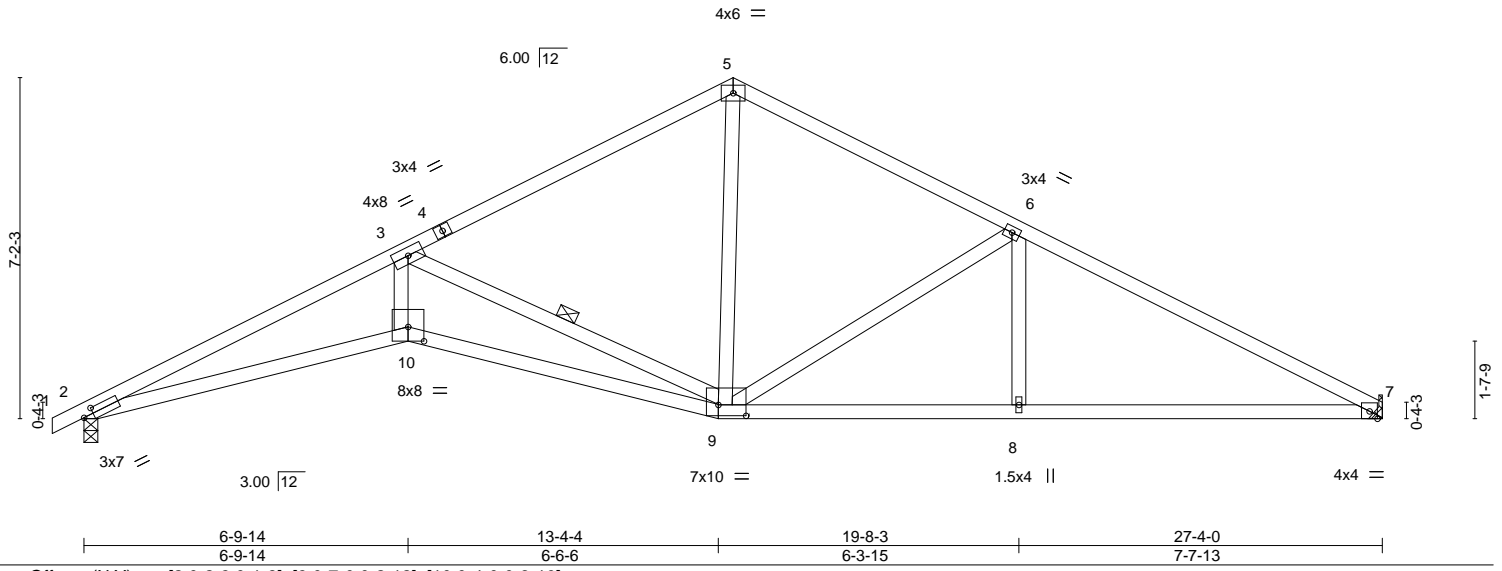


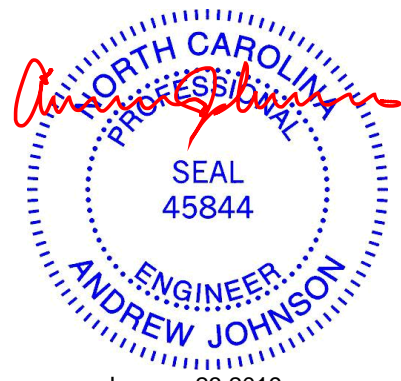
Plate Offsets (X,Y)--	[2:0-2-9,0-1-8], [9:0-7-0,0-2-12], [10:0-4-0,0-3-10]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.63	Vert(LL) -0.25 9-10 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.94	Vert(CT) -0.52 9-10 >631 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.82	Horz(CT) 0.26 7 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS		Weight: 127 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 3-9

REACTIONS. (lb/size) 7=1093/Mechanical, 2=1134/0-3-8
Max Horz 2=120(LC 11)
Max Uplift 7=53(LC 12), 2=73(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3623/552, 3-5=-1362/288, 5-6=-1320/292, 6-7=-1913/321
BOT CHORD 2-10=-438/3282, 9-10=-450/3432, 8-9=-199/1656, 7-8=-199/1656
WEBS 3-10=-138/1738, 3-9=-2447/419, 5-9=-98/743, 6-9=-673/176, 6-8=0/301

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions and forces; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Refer to girder(s) for truss to truss connections.
 - Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



January 23, 2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job 19755-19755A	Truss T1BV	Truss Type ROOF TRUSS	Qty 5	Ply 1	Winston C vault Bonus Job Reference (optional)	135916681
---------------------	---------------	--------------------------	----------	----------	---	-----------

84 Components, Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Jan 22 14:10:55 2019 Page 1

ID:B86d_O3qmX394qlcAhGzWryKJF9-KZd_hPMNSY9icmenES9SjMvOq1hpWkcbKFI0DNzsnGk



Scale = 1:53.4

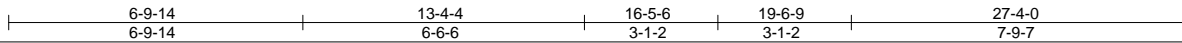
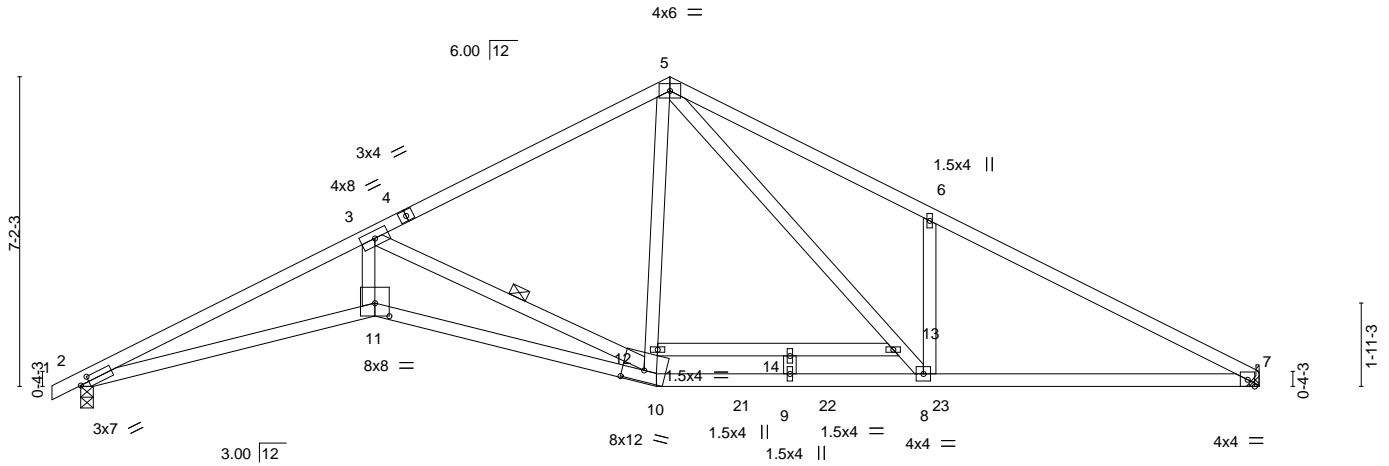


Plate Offsets (X,Y)-- [2:0-2-8,0-1-8], [10:0-6-0,0-3-2], [11:0-4-0,0-3-10]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.66	Vert(LL)	-0.25	10-11	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.95	Vert(CT)	-0.53	10-11	>617		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.79	Horz(CT)	0.26	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS						
								Weight: 138 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
12-13: 2x4 SP No.2

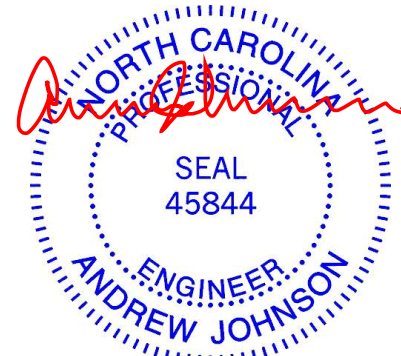
BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-10

REACTIONS. (lb/size) 7=1093/Mechanical, 2=1134/0-3-8
Max Horz 2=120(LC 11)
Max Uplift 7=-53(LC 12), 2=-73(LC 12)
Max Grav 7=1140(LC 30), 2=1162(LC 27)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3732/551, 3-5=-1428/288, 5-6=-2044/460, 6-7=-2020/322
BOT CHORD 2-11=-437/3380, 10-11=-449/3534, 9-10=-48/1186, 8-9=-48/1186, 7-8=-200/1751
WEBS 3-11=-137/1782, 3-10=-2492/418, 10-12=-10/446, 5-12=-6/460, 5-13=-220/891,
8-13=-229/879, 6-8=-460/236

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BC DL=6.0psf; h=30ft; B=45ft; L=45ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Refer to girder(s) for truss to truss connections.
 - Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2.
 - Load case(s) 26, 27, 28, 29, 30 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
 - MULTIPLE LOADCASES – This design is the composite result of multiple load cases.
 - User moving load cases exist: Review the load cases for details.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard Except:



January 23, 2019

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Winston C vault Bonus	I35916681
19755-19755A	T1BV	ROOF TRUSS	5	1	Job Reference (optional)	

84 Components, Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Jan 22 14:10:55 2019 Page 2
ID:B86d_O3qmX394qlcAhGzWryKJF9-KZd_hPMNSY9icmenES9SjMvOq1hpWkcbKFI0DNzsnGk

LOAD CASE(S)

- 26) User defined: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-60(F), 5-7=-60(F), 11-18=-20(F), 10-11=-20(F), 10-15=-20(F)
- 27) 1st User Defined Moving Load - User defined: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-60(F), 5-7=-60(F), 11-18=-20(F), 10-11=-20(F), 10-21=-50(F=-20), 15-21=-20(F)
- 28) 2nd User Defined Moving Load - User defined: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-60(F), 5-7=-60(F), 11-18=-20(F), 10-11=-20(F), 10-21=-20(F), 21-22=-50(F=-20), 15-22=-20(F)
- 29) 3rd User Defined Moving Load - User defined: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-60(F), 5-7=-60(F), 11-18=-20(F), 10-11=-20(F), 10-22=-20(F), 22-23=-50(F=-20), 15-23=-20(F)
- 30) 4th User Defined Moving Load - User defined: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-60(F), 5-7=-60(F), 11-18=-20(F), 10-11=-20(F), 10-22=-20(F), 8-22=-50(F=-20), 8-15=-20(F)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



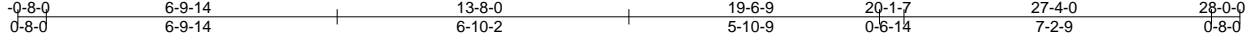
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Winston C vault Bonus	135916682
19755-19755A	T1CV	ROOF TRUSS	1	1		

84 Components, Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Jan 22 14:10:56 2019 Page 1

ID:B86d_O3qmX394qlcAhGzWryKJF9-olBMuIM?DsHZewDzoAghGZSZZR12FBskZv1alpsnGj



Scale = 1:54.0

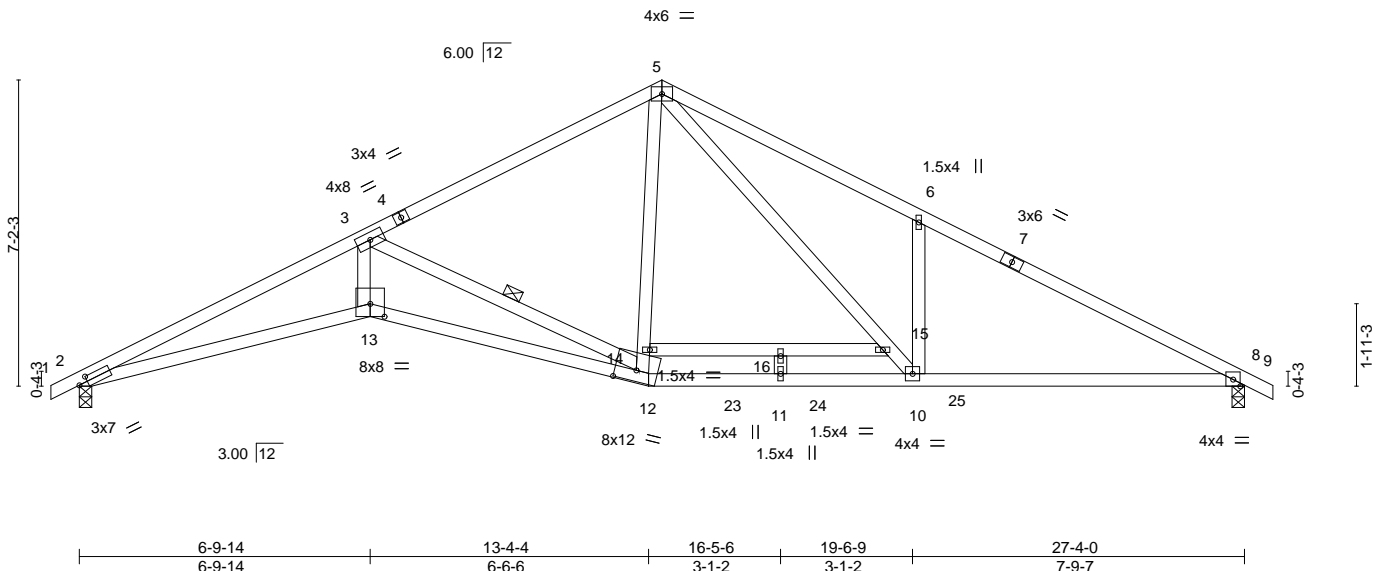


Plate Offsets (X,Y)--	[2:0-2-8,0-1-8], [12:0-6-0,0-3-2], [13:0-4-0,0-3-10]
-----------------------	--

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.66	Vert(LL)	-0.25	12-13	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.95	Vert(CT)	-0.53	12-13	>617		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.79	Horz(CT)	0.26	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS						
								Weight: 139 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3 *Except* 14-15: 2x4 SP No.2	WEBS 1 Row at midpt 3-12

REACTIONS. (lb/size) 2=1133/0-3-8, 8=1133/0-3-8
 Max Horz 2=121(LC 11)
 Max Uplift 2=-72(LC 12), 8=-72(LC 12)
 Max Grav 2=1162(LC 27), 8=1140(LC 30)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-3732/536, 3-5=-1428/287, 5-6=-2044/457, 6-8=-2020/320
 BOT CHORD 2-13=-413/3380, 12-13=-423/3534, 11-12=-36/1186, 10-11=-36/1186, 8-10=-187/1751
 WEBS 3-13=-124/1782, 3-12=-2492/403, 12-14=-10/446, 5-14=-6/460, 5-15=-219/891,
 10-15=-227/879, 6-10=-458/235

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.
 - Load case(s) 26, 27, 28, 29, 30 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
 - MULTIPLE LOADCASES - This design is the composite result of multiple load cases.
 - User moving load cases exist: Review the load cases for details.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard Except:
 26) User defined: Lumber Increase=1.15, Plate Increase=1.15



January 23, 2019

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
 A MiTek Affiliate

818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Winston C vault Bonus	135916682
19755-19755A	T1CV	ROOF TRUSS	1	1	Job Reference (optional)	

84 Components, Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Jan 22 14:10:56 2019 Page 2
ID:B86d_O3qmX394qicAhGzWryKJF9-olBMulM?DshZEwDzoAghGZSZZR12FBskZv1alpszngj

LOAD CASE(S)

- Uniform Loads (plf)
Vert: 1-5=-60(F), 5-8=-60(F), 13-17=-20(F), 12-13=-20(F), 12-20=-20(F)
- 27) 1st User Defined Moving Load - User defined: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-60(F), 5-8=-60(F), 13-17=-20(F), 12-13=-20(F), 12-23=-50(F=-20), 20-23=-20(F)
- 28) 2nd User Defined Moving Load - User defined: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-60(F), 5-8=-60(F), 13-17=-20(F), 12-13=-20(F), 12-23=-20(F), 23-24=-50(F=-20), 20-24=-20(F)
- 29) 3rd User Defined Moving Load - User defined: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-60(F), 5-8=-60(F), 13-17=-20(F), 12-13=-20(F), 12-24=-20(F), 24-25=-50(F=-20), 20-25=-20(F)
- 30) 4th User Defined Moving Load - User defined: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-60(F), 5-8=-60(F), 13-17=-20(F), 12-13=-20(F), 12-24=-20(F), 10-24=-50(F=-20), 10-20=-20(F)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

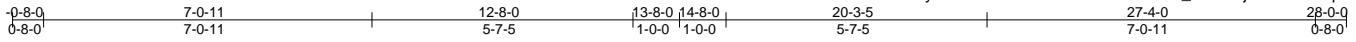


818 Soundside Road
Edenton, NC 27932

Job 19755-19755A	Truss T1D	Truss Type ROOF TRUSS	Qty 8	Ply 1	Winston C vault Bonus 135916683
84 Components, Dunn, NC - 28334,					Job Reference (optional)

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Jan 22 14:10:58 2019 Page 1

ID:wVSEC824Ncb18tixDQhBdDyKJcC-k816JROGITYHTENMvai9L_XxuElxjBD10CWhqizsnGh



Scale = 1:49.5

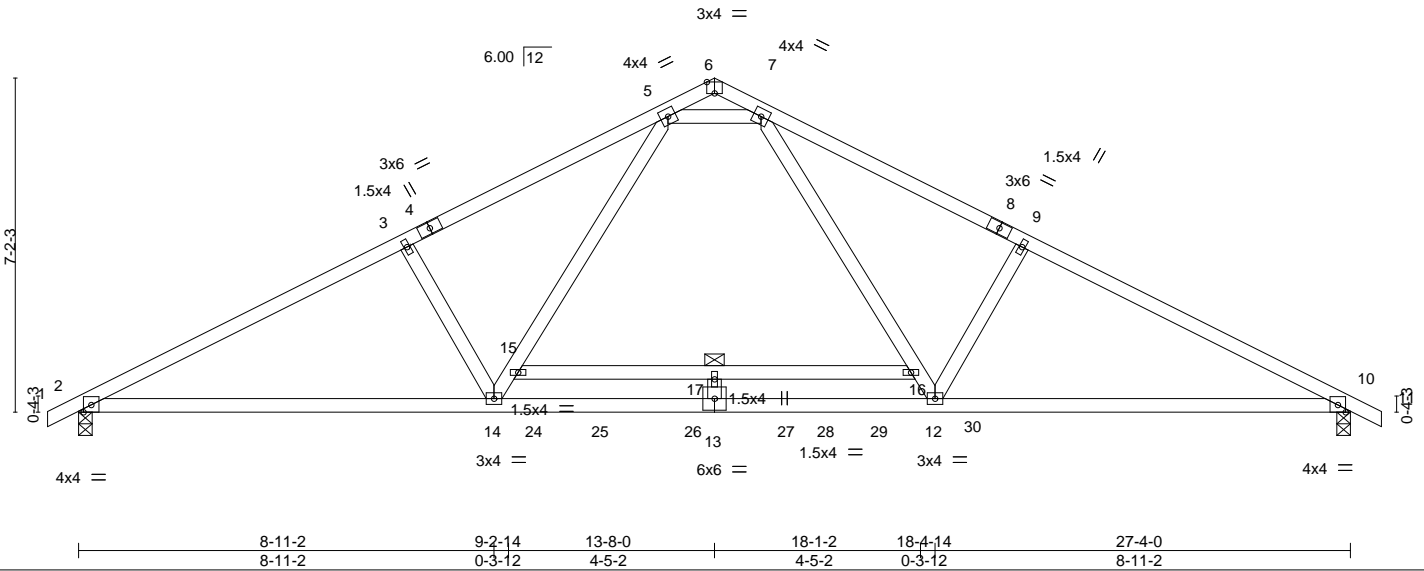


Plate Offsets (X,Y)--	[6:0-2-0,Edge]						
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.15	TC 0.54	Vert(LL)	-0.13 14-20	>999	240
TCDL 10.0	Lumber DOL	1.15	BC 0.80	Vert(CT)	-0.31 14-20	>999	180
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.41	Horz(CT)	0.06 10	n/a	n/a
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS				
							PLATES
							MT20
							GRIP
							244/190
							Weight: 138 lb
							FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3 *Except*	WEBS 1 Row at midpt 15-16
15-16: 2x4 SP No.2	

REACTIONS. (lb/size) 2=1133/0-3-8, 10=1133/0-3-8
 Max Horz 2=-121(LC 10)
 Max Uplift 2=-72(LC 12), 10=-72(LC 12)
 Max Grav 2=1171(LC 27), 10=1171(LC 31)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2008/334, 3-5=-1837/357, 7-9=-1837/357, 9-10=-2008/334
 BOT CHORD 2-14=-206/1750, 13-14=-74/1247, 12-13=-74/1247, 10-12=-207/1750
 WEBS 3-14=-428/196, 9-12=-428/196, 14-15=-85/668, 5-15=-79/693, 5-7=-1300/425,
 7-16=-79/693, 12-16=-85/668

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10.
 - Load case(s) 26, 27, 28, 29, 30, 31 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
 - MULTIPLE LOADCASES - This design is the composite result of multiple load cases.
 - User moving load cases exist: Review the load cases for details.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard Except:
 26) User defined: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-6=-60(F), 6-11=-60(F), 18-21=-20(F)



January 23, 2019

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
 A MiTek Affiliate

818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Winston C vault Bonus	135916683
19755-19755A	T1D	ROOF TRUSS	8	1	Job Reference (optional)	

84 Components, Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Jan 22 14:10:58 2019 Page 2
 ID:wVSEC824Ncb18tixDQhBdDyKJcC-k8l6JROGITYHTENMvai9L_XxuElxjBD10CWhqizsnGh

LOAD CASE(S)

- 27) 1st User Defined Moving Load - User defined: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-6=-60(F), 6-11=-60(F), 18-24=-20(F), 24-25=-50(F=-20), 21-25=-20(F)
- 28) 2nd User Defined Moving Load - User defined: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-6=-60(F), 6-11=-60(F), 18-25=-20(F), 25-26=-50(F=-20), 21-26=-20(F)
- 29) 3rd User Defined Moving Load - User defined: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-6=-60(F), 6-11=-60(F), 18-26=-20(F), 26-27=-50(F=-20), 21-27=-20(F)
- 30) 4th User Defined Moving Load - User defined: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-6=-60(F), 6-11=-60(F), 18-27=-20(F), 27-29=-50(F=-20), 21-29=-20(F)
- 31) 5th User Defined Moving Load - User defined: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-6=-60(F), 6-11=-60(F), 18-28=-20(F), 28-30=-50(F=-20), 21-30=-20(F)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



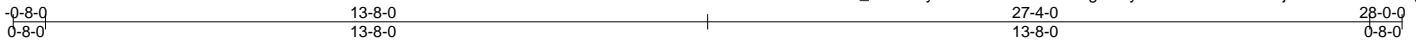
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Winston C vault Bonus	135916684
19755-19755A	T1GE	GABLE	1	1		
Job Reference (optional)						

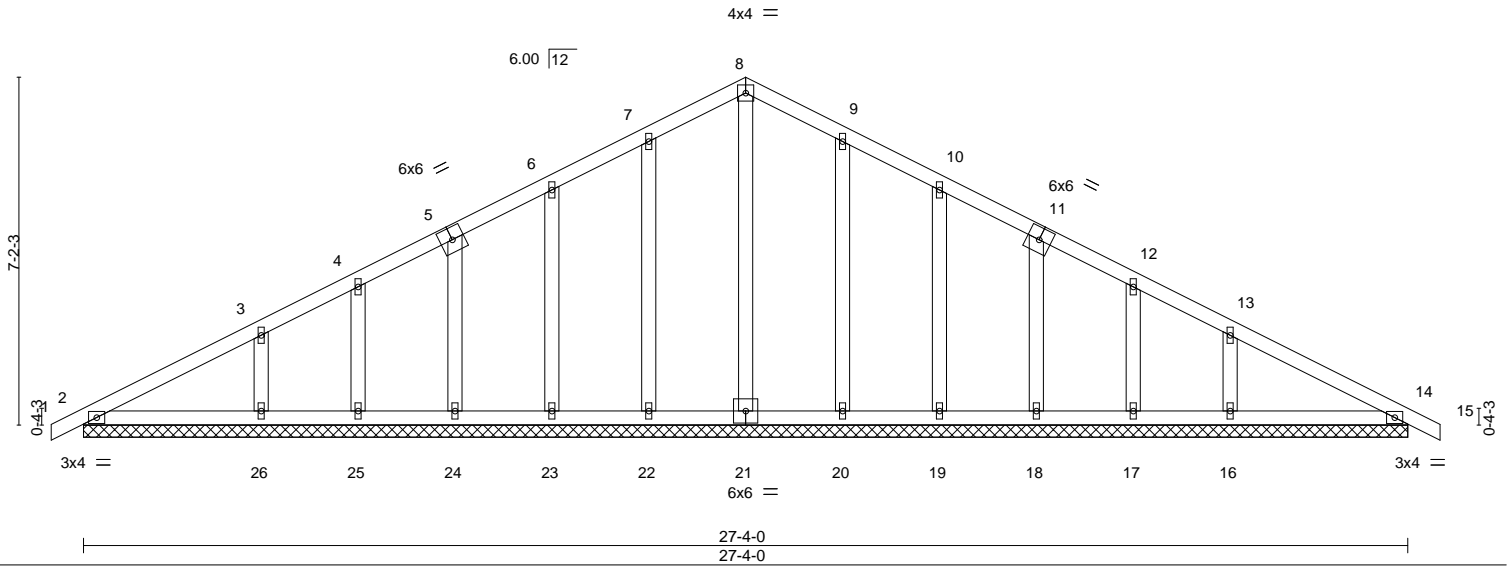
84 Components, Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Jan 22 14:10:59 2019 Page 1

ID:8WENP455I8JtK7v_16JRbGyKJF7-CKsUXnPuWng85OyYTIIDtC4BYeGwSjVBFsGEM8zsnGg



Scale: 1/4"=1'



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.16	Vert(LL)	0.00 15	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	0.01 15	n/r	90		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.09	Horz(CT)	0.00 14	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 153 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 OTHERS 2x4 SP No.3

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 27-4-0.
 (lb) - Max Horz 2=-121(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16, 14
 Max Grav All reactions 250 lb or less at joint(s) 2, 21, 22, 23, 24, 25, 20, 19, 18, 17, 14 except 26=292(LC 21), 16=292(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) All plates are 1.5x4 MT20 unless otherwise indicated.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Gable studs spaced at 2-0-0 oc.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16, 14.
 - 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 14.



January 23, 2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
 A MiTek Affiliate

818 Soundside Road
 Edenton, NC 27932

Job 19755-19755A	Truss T2	Truss Type FINK	Qty 10	Ply 1	Winston C vault Bonus Job Reference (optional)	135916685
---------------------	-------------	--------------------	-----------	----------	---	-----------

84 Components, Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Jan 22 14:11:01 2019 Page 1

ID:GEvLXuWjB?uffdi9EcivuhytZRY-8j_FxTQ81OwsKh5xbjGszd9SMSmdwb8TjAlLQ1zsnGe



4x6 ||

Scale = 1:43.6

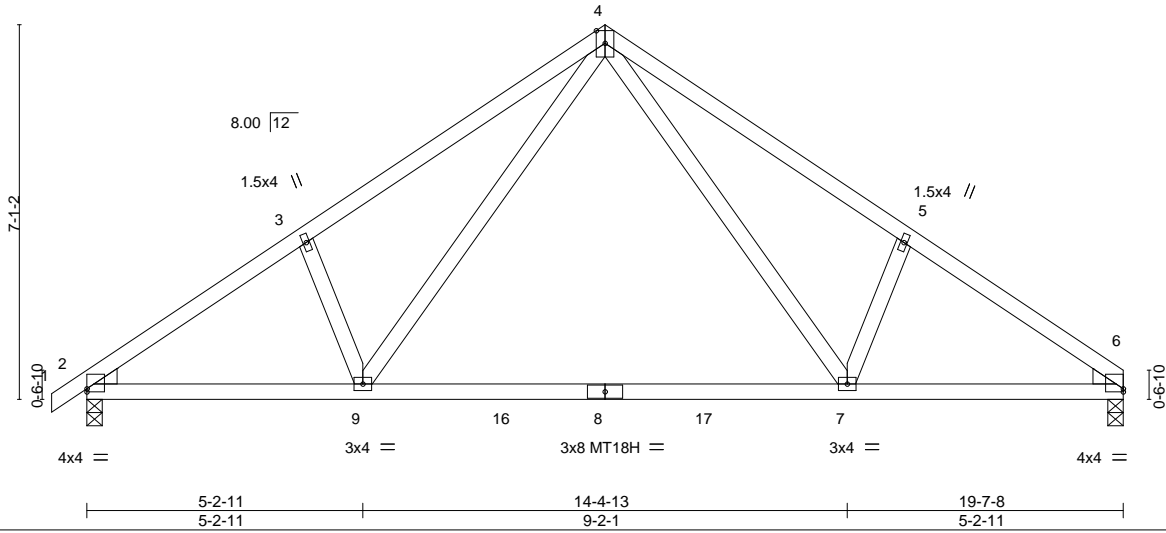


Plate Offsets (X,Y)-- [2:0-0-0,0-0-11], [6:Edge,0-0-11]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.46	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.80	Vert(LL) -0.24 7-9 >965 240	MT18H	244/190
BCLL 0.0 *	Lumber DOL 1.15	WB 0.21	Vert(CT) -0.43 7-9 >542 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.03 6 n/a n/a		
	Code IRC2015/TPI2014			Weight: 100 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3

WEDGE
 Left: 2x4 SP No.3, Right: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-8-13 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

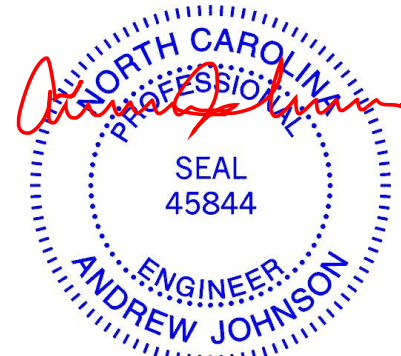
(lb/size) 2=826/0-3-8, 6=784/0-3-8
 Max Horz 2=130(LC 11)
 Max Uplift 2=-58(LC 12), 6=-38(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-1166/122, 3-4=-1112/194, 4-5=-1115/195, 5-6=-1169/123
 BOT CHORD 2-9=-54/1003, 7-9=0/602, 6-7=-55/916
 WEBS 3-9=-263/155, 4-9=-56/557, 4-7=-57/561, 5-7=-265/155

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.



January 23, 2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



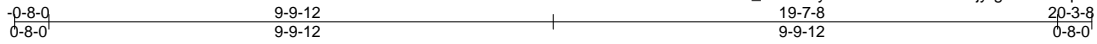
818 Soundside Road
 Edenton, NC 27932

Job 19755-19755A	Truss T2GE	Truss Type GABLE	Qty 1	Ply 1	Winston C vault Bonus Job Reference (optional)	135916686
---------------------	---------------	---------------------	----------	----------	---	-----------

84 Components, Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Jan 22 14:11:02 2019 Page 1

ID:8WENP45518JtK7v_l6JrBgyKJF7-dvYd9oRmoi2jyrg78Qn5VqjkUsInf4GdxqUuzTzsnGd



Scale = 1:44.8

Plate Offsets (X,Y)--	[2:0-0-9,0-0-13], [2:0-1-1,0-5-2], [2:0-3-8,Edge], [12:0-0-9,0-0-13], [12:0-1-1,0-5-2], [12:0-3-8,Edge]
-----------------------	---

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	-0.00	12	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	0.00	12	n/r		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.09	Horz(CT)	0.00	12	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 116 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	
WEDGE	
Left: 2x4 SP No.3, Right: 2x4 SP No.3	

REACTIONS. All bearings 19-7-8.
 (lb) - Max Horz 2=133(LC 11)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 19, 20, 21, 22, 17, 16, 15, 14
 Max Grav All reactions 250 lb or less at joint(s) 2, 12, 18, 19, 20, 21, 22, 17, 16, 15, 14

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

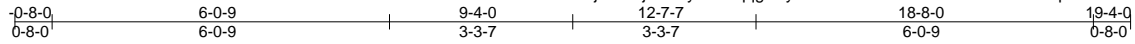
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) All plates are 1.5x4 MT20 unless otherwise indicated.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Gable studs spaced at 2-0-0 oc.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 19, 20, 21, 22, 17, 16, 15, 14.



Job 19755-19755A	Truss T3	Truss Type COMMON	Qty 6	Ply 1	Winston C vault Bonus 135916687
---------------------	-------------	----------------------	----------	----------	------------------------------------

84 Components, Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Jan 22 14:11:03 2019 Page 1



4x4 =

Scale = 1:41.3

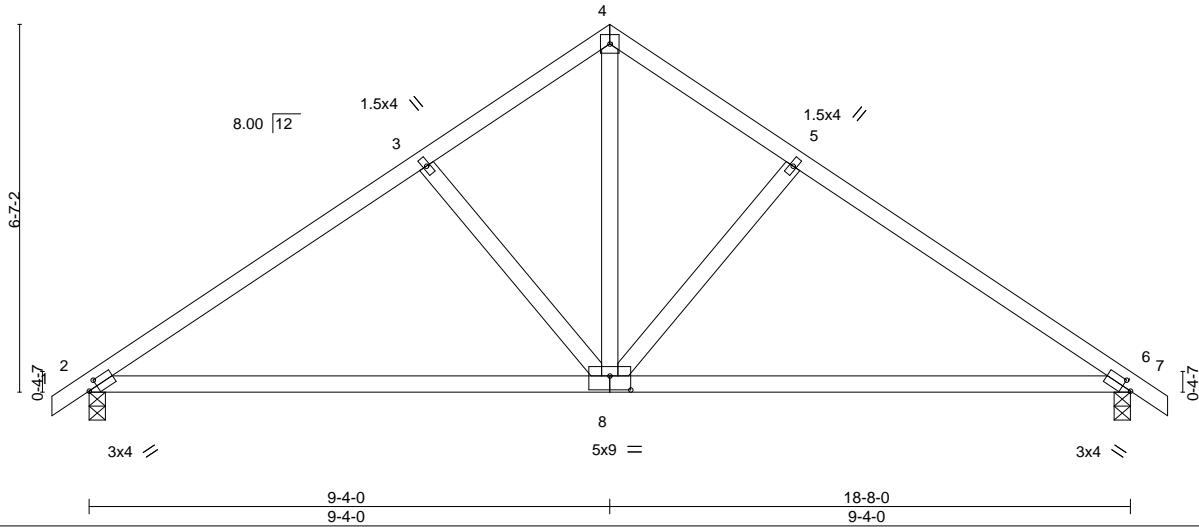


Plate Offsets (X,Y)--	[2:0-2-0,0-1-8], [6:0-2-0,0-1-8], [8:0-4-8,0-3-0]
-----------------------	---

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.45	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.83	Vert(LL) -0.13 8-14 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.28	Vert(CT) -0.29 8-14 >781 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.02 6 n/a n/a		
	Code IRC2015/TPI2014			Weight: 88 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-0-4 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

REACTIONS. (lb/size) 2=787/0-3-8, 6=787/0-3-8
 Max Horz 2=-127(LC 10)
 Max Uplift 2=-56(LC 12), 6=-56(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-989/134, 3-4=-790/141, 4-5=-790/141, 5-6=-989/134
 BOT CHORD 2-8=-17/777, 6-8=-17/777
 WEBS 3-8=-304/137, 4-8=-104/683, 5-8=-305/137

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

TRENCO
 ENGINEERING BY
 A MiTek Affiliate

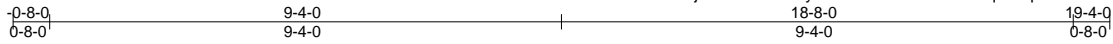
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Winston C vault Bonus	135916688
19755-19755A	T3GE	GABLE	1	1	Job Reference (optional)	

84 Components, Dunn, NC - 28334,

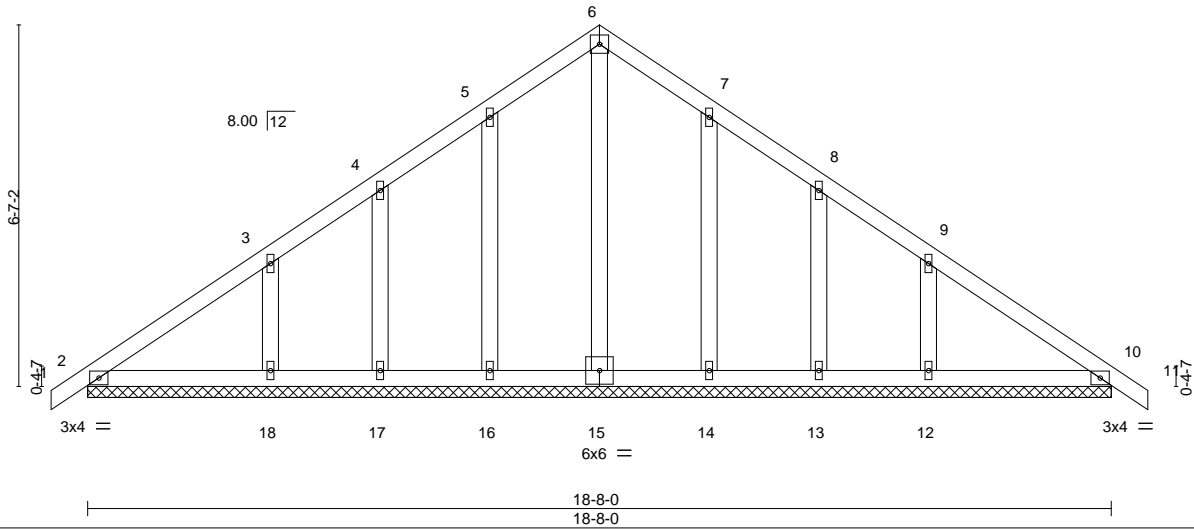
8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Jan 22 14:11:04 2019 Page 1

ID:WJatG1fh2ujJx4uDILOxhWytZQ4-ZIfNaUT1KJIQB9qWGrpZaFn2mfzN7_2wP8z?1LzsnGb



4x4 =

Scale = 1:42.0



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.13	Vert(LL)	0.00	11	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	0.01	11	n/r		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.07	Horz(CT)	0.00	10	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 103 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 OTHERS 2x4 SP No.3

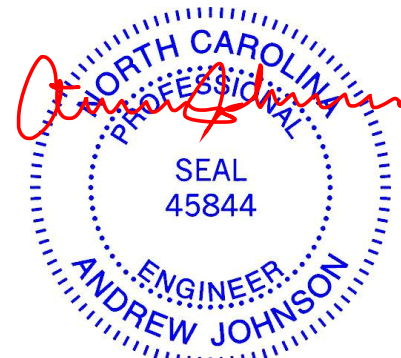
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 18-8-0.
 (lb) - Max Horz 2=-127(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 16, 17, 18, 14, 13, 12, 10
 Max Grav All reactions 250 lb or less at joint(s) 2, 15, 16, 17, 14, 13, 10 except 18=270(LC 17), 12=269(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BC DL=6.0psf; h=30ft; B=45ft; L=45ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 1.5x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 16, 17, 18, 14, 13, 12, 10.



January 23, 2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road
 Edenton, NC 27932

Job 19755-19755A	Truss T3GR	Truss Type COMMON	Qty 1	Ply 2	Winston C vault Bonus Job Reference (optional)	135916689
---------------------	---------------	----------------------	----------	----------	---	-----------

84 Components, Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Jan 22 14:11:06 2019 Page 1

ID:yDwOrSBxtiP965oYjunU5hytbDa-Vgn8?AUHswY8RS_uNGr1fgtGmTYEbkQDsSS66EzsnGZ



4x6 ||

Scale = 1:40.1

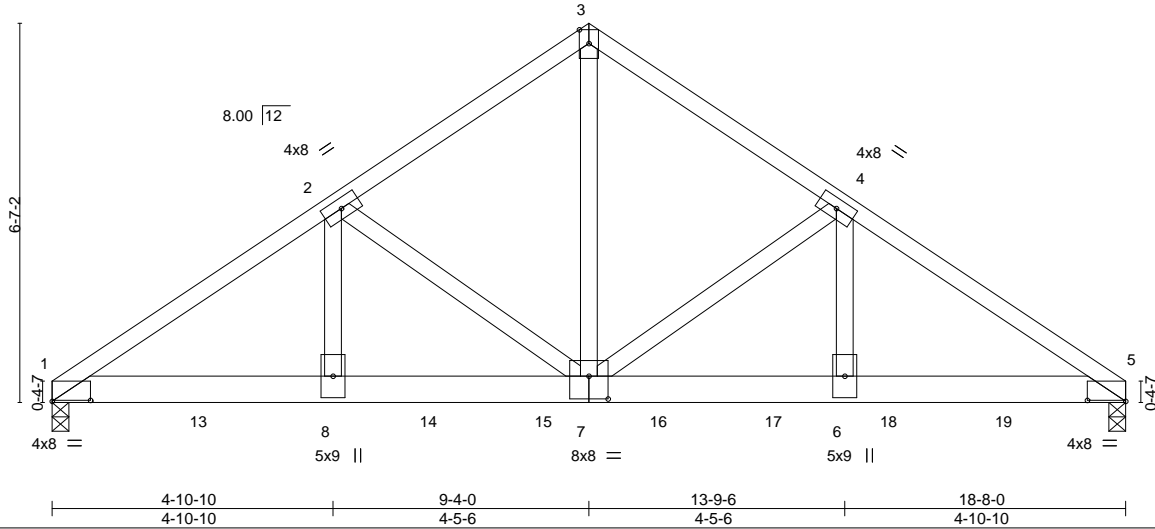


Plate Offsets (X,Y)--	[1:0-8-0,0-0-3], [5:0-8-0,0-0-3], [7:0-4-0,0-4-12]
-----------------------	--

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.67	Vert(LL) -0.10 7-8 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.58	Vert(CT) -0.20 7-8 >999 180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.72	Horz(CT) 0.05 5 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS		Weight: 220 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-7-0 oc purlins.
BOT CHORD 2x6 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 3-7: 2x4 SP No.2	

REACTIONS. (lb/size) 1=6115/0-3-8, 5=5276/0-3-8
 Max Horz 1=-118(LC 31)
 Max Uplift 1=-347(LC 12), 5=-306(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-8399/552, 2-3=-5604/424, 3-4=-5603/424, 4-5=-8201/547
 BOT CHORD 1-8=-394/6970, 7-8=-394/6970, 6-7=-390/6800, 5-6=-390/6800
 WEBS 3-7=-379/5874, 4-7=-2724/247, 4-6=-119/2747, 2-7=-2934/252, 2-8=-124/2971

- NOTES-**
- 2-ply truss to be connected together with 10d (0.120"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=347, 5=306.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1124 lb down and 69 lb up at 0-7-4, 1120 lb down and 73 lb up at 2-7-4, 1120 lb down and 73 lb up at 4-7-4, 1120 lb down and 73 lb up at 6-7-4, 1120 lb down and 73 lb up at 8-7-4, 1073 lb down and 73 lb up at 10-7-4, 1073 lb down and 73 lb up at 12-7-4, and 1073 lb down and 73 lb up at 14-7-4, and 1073 lb down and 73 lb up at 16-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15



January 23, 2019

Continued on page 2

<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY TRENCO <small>A MiTek Affiliate</small></p> <p>818 Soundside Road Edenton, NC 27932</p>
---	---

Job 19755-19755A	Truss T3GR	Truss Type COMMON	Qty 1	Ply 2	Winston C vault Bonus Job Reference (optional)	I35916689
---------------------	---------------	----------------------	----------	----------	---	-----------

84 Components, Dunn, NC - 28334,

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Jan 22 14:11:06 2019 Page 2
ID:yDwOrSBxtiP965oYjunU5hytbDa-Vgn8?AUHswY8RS_uNGr1fgtGmTYEbkQDsSS66EzsnGZ

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-3=-60, 3-5=-60, 1-5=-20

Concentrated Loads (lb)

Vert: 8=-1120(F) 10=-1124(F) 13=-1120(F) 14=-1120(F) 15=-1120(F) 16=-1073(F) 17=-1073(F) 18=-1073(F) 19=-1073(F)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

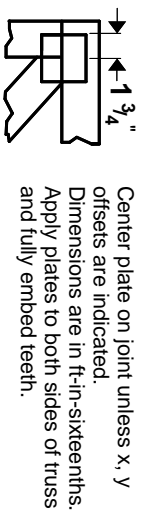
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



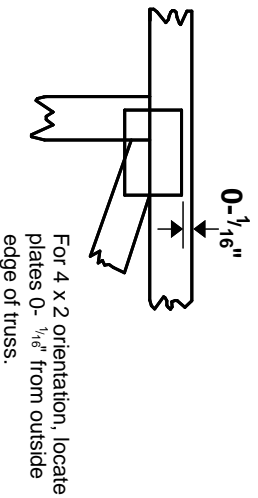
818 Soundside Road
Edenton, NC 27932

Symbols

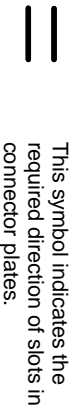
PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.



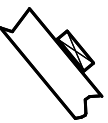
This symbol indicates the required direction of slots in connector plates.

PLATE SIZE

4 X 4

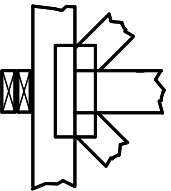
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING

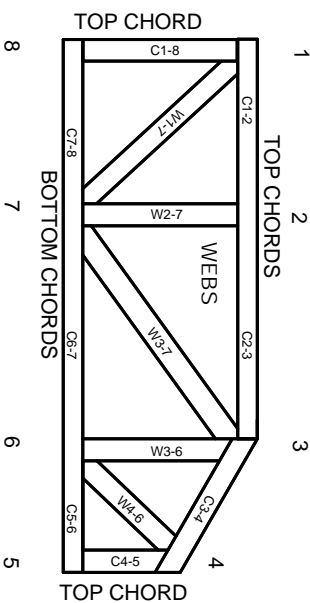


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI 1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

© 2012 MITTEK® All Rights Reserved



MITek Engineering Reference Sheet: MI-7473 rev. 10/03/2015



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.